(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 4 November 2004 (04.11.2004)

PCT

(10) International Publication Number WO 2004/095448 A1

(51) International Patent Classification⁷: 23/36, 7/24, 19/04

G11B 20/00,

(21) International Application Number:

PCT/IB2004/001238

(22) International Filing Date: 15 April 2004 (15.04.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 03290992.1

23 April 2003 (23.04.2003) EF

(71) Applicant (for all designated States except US): KONIN-KLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): KURT, Ralph [DE/NL]; c/o Société Civile SPID, 156 Boulevard Haussmann, F-75008 PARIS (FR). HENDRIKS, Robert [NL/NL]; c/o Société Civile SPID, 156 Bd Haussmann, F-75008 PARIS (FR). SETAYESH, Sepas [IR/NL]; c/o Société Civile SPID, 156 Bd Haussmann, F-75008 PARIS (FR).

(74) Agent: ROCHE, Denis; Société Civile SPID, 156 Boulevard Haussmann, F-75008 PARIS (FR).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

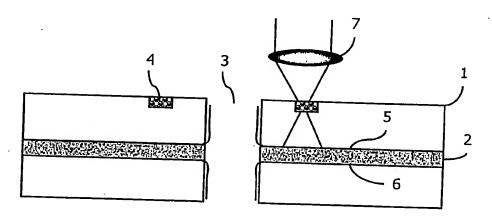
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

 as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,

[Continued on next page]

(54) Title: COPY-PROTECTED DATA CARRIER



(57) Abstract: The present invention relates to a data carrier comprising an information layer (1) itself comprising a specific area (4) able to deliver a first optical signal and a second optical signal when illuminated by a light source. Said data carrier also comprises an additional layer (2) able to deliver an electrical signal when illuminated by the second optical signal, said electrical signal corresponding to a predetermined pattern. The combination of the first optical signal and of the electrical signal forms a cryptographic key that is required to decrypt encrypted data contained in the information layer. This invention is particularly relevant to the read out of data stored on optical discs of the Read Only Memory type.